

TOP SECRET

Approved For Release 2004/05/05 : CIA-RDP78B05171A000600010077-9

Copy 6 of 6

MEMORANDUM FOR: Director, National Photographic Interpretation Center

SUBJECT : Request for Approval of a Contract with [redacted] for the Design of Low Power Objective Lenses at a Cost of [redacted] from FY-1970 R&D Funds

1. This memorandum requests approval for the commitment of R&D funds for a contract. The specific request is stated in Paragraph 6.

2. The Advanced Stereo Rhomboid, presently under development by [redacted] includes three pairs of objectives which provide rhomboid magnifications of 1X, 2X, and 3X. When combined with a Zoom 240 Stereoscope equipped with 10X eyepieces, the system magnification ranges from 7X to 90X, and the field of view ranges from 25mm to 2.2mm. Future acquisition systems will produce imagery with a much larger scale than present systems. During the exploitation of these systems, it becomes very useful to resort to lower magnifications in order to gain the attendant larger fields of view. Also, the current characteristics of the imagery from manned aircraft makes the larger field of view obtained with a 1/2X objective lens highly useful for scanning this type of imagery. At the same time, a 1/2X objective lens would be utilized for scanning of the [redacted] imagery. Detailed analysis of this imagery would be performed with the presently designed 1X, 2X, and 3X objective lenses. The 1/2X and 1/4X objective lenses, with an associated Zoom 240 Stereoscope equipped with 10X eyepieces, would provide magnifications down to 1.75X and a field of view up to 112mm. IEG has formally requested that TSSG initiate a program to develop both the 1/2X and 1/4X objective lenses. This project is in direct response to that request.

3. The proposed project will study the feasibility of developing prototype 1/2X and 1/4X objective lenses for the Advanced Stereo Rhomboid. A preliminary study has been made of one possible configuration that can be used in the development of these lenses. Enough analysis has been completed to indicate that the approach appears practical and that the lenses would have the same eyepoint and working distance as the present 1X, 2X, and 3X objective lenses. This project would make preliminary system studies of a number of possible configurations and would, assuming a feasible solution is found, pursue the most promising configuration to complete the preliminary optical design. Monthly

Declass Review by NIMA/DOD

Approved For Release 2004/05/05 : CIA-RDP78B05171A000600010077-9

TOP SECRET

GROUP 1 Excluded from automatic downgrading and declassification

25X1

25X1

25X1

25X1

25X1



25X1

Approved For Release 2004/05/05 : CIA-RDP78B05171A000600010077-9

Approved For Release 2004/05/05 : CIA-RDP78B05171A000600010077-9